

Mycogen Corporation Appoints Speciale to Board of Directors	22
Advance Into Pharmaceuticals	22
Application of Tunable Laser to Laser Chemical Processes	27
New Resin for Irresistible Optical Disc	27
Research Work on Josephson Computers in Japan	28
Rare Metal Resource Strategy	28
Optical Fiber Base Material Using New VAD Process	29
Adsorbent for Affinity Chromatography	29
Software for Biotechnology Research	29
Superhigh Speed Optical Fiber Transmission Using Long-Wavelength OEIC	30
Experiment on Protein Molecular Orientation	30
Gallium Arsenide LEC Wafer Mass Production Technique	30
New Ceramics Strategy by General Trading Firms	30
Bayer Ups Sales 9.4% in First 9 Months of 1985	31
U.S. Venture Businesses Moving Into GaAs VLSI Market	31
Hitachi Ltd. Develops Optical IC With Switching Function	31

Business World

Energy ... 32/Electronics ... 33/Chemical Industries ... 35/Plant Engineering ... 37/Steel & Other Metals ... 39
--

Congress & Exhibition

Genetic Engineering in Application — From BIOTEC Düsseldorf	40
--	----

New Product

New Publication	42
Index to Advertisers	43

May 1986 Vol. 18 No. 5 (No. 198)

The Economics and Outlook for Fertilizer Production by W.F. Sheldrick	5
International Trends in Sulfur — Overview for 1985-1986 — by Dr. Raisaku Kiyoura	14
Technical Aspects of Reducing Energy Consumption in New and Existing Ammonia Plants by J. R. LeBlanc	22
Urea Process Technology — Today and Tomorrow — by H. Uchino, A. Fukui & K. Urabe	28
Development Trends in Engineering Fine Ceramics by Fuwako Aimori	36

News Scope

Oil Development Investment	13
Fatty Acid Ester Production by Bioreactor	13
Integration of ICs	21
Permanent Storage of Electric Power	21
Hydrogen-Fueled Vehicles	27
World Soda Ash Demand to Increase to Thirty-Four Million Metric Tons	35
Swiss Chemical Makers Active in Buyout Operations	35
GaAs Standard Logic ICs	39

Business World

Energy ... 40/Electronics ... 40/Chemical Industries ... 41/Plant Engineering ... 44/Steel & Other Metals ... 46
--

Index to Advertisers	47
----------------------	----

June 1986 Vol. 18 No. 6 (No. 199)

Status of Plasma Chemistry and the Future by Yuichi Sakamoto	5
Functional Properties and Applications of Rare Earths by Dr. Yasuaki Osumi	10

Jan./Feb./March 1987 Vol. 19 No. 1-2-3 (No. 205)

A General Survey of Superhigh-Purity Metals

by Masatoshi Sugimori 19

Productivity Is The Crux

by O. P. Kharbada 24

News Scope

Space Environment Utilization Center	23
Materials Adapted for Living Body	26
Ceramic Engine	26
Alloy Material for Superhigh Temperature Resistance Metal Mold	26
Treatment of Old Waste Dumps	26
Licensing of Polypropylene Manufacturing Process	27
Geneva Agriculture Forum Told How Kellogg Overcame Obstacles to Get Nigerian Complexes Onstream	27
ICI Australia to Acquire Ferro Corporation's Zirconia Operation	29
More Reliable Monitoring System	29
Optimum System Configuration Using Artificial Intelligence	29
Texaco Process Coal Gasification Plants	30
Japanese Polycrystal Silicon Plant in the U.S.	30
West German Chemical Strategy in the U.S.	30
Solid Fuel Cell	30
Butanol Production Directly From Cellulose	31
World's First Transparent Zirconia	31
Tissue Culture and Pharmaceuticals Production	31

Business World

Energy ... 32/Electronics ... 33/Chemical Industries ... 34/Plant Engineering ... 36/Steel & Other Metals ... 37
--

Congress & Exhibition	39
-----------------------	----

Index to Advertisers	39
----------------------	----

July/August 1986 Vol. 18 No. 7-8 (No. 200)

Biotechnology Opportunities and Challenges: Markets, Engineering and Regulation by Roger E. Shamel & Mark Keil	5
The Present Situation of Biotechnology in the Oleochemical Industry by Jiro Hirano	9
Preparation of Engineering Industry for Biotechnology by Tomiaki Yamada	14
A Fermentation Process for the Production of Optically Active Epoxides by Keizo Furuhashi	21

News Scope

Titanium Dioxide Plant in Singapore	26
Utilization of High-Temperature Gas Reactor Nuclear Heat	26
Engineering Companies Planning to Reduce Employees	27
Fiscal 1986 Research and Development Plan	27
Light-Water Reactors to Lead in Commercial Power Generation	27

Business World

Energy ... 28/Electronics ... 30/Chemical Industry ... 31/Plant Engineering ... 33/Steel & Other Metals ... 35
--

Index to Advertisers	36
----------------------	----

September 1986 Vol. 18 No. 9 (No. 201)

Material Innovations by High-Density Energy Science by T. Murata, K. Takeda & K. Minamida	5
The Accident in Chernobyl Nuclear Power Plant and Coal Gasification Engineering by Ube Industries by Staff Writers	10
Advanced Materials and Japanese Industry by Moriyo Uchida	12

MTBE Production Technologies and Economics	
by A.K.K. Lee & Adnan Al-Jarallah	25
The GSP Process—Developments in the Field of Pressure Gasification of Pulverized Brown Coal in the GDR	
by M. Schingnitz, H. Brandt, F. Berger, P. Göhler & H. Kretschmer	35

News Scope

SABIC 1986 Output Tops 5.7 Million Tons Through June, 93 Percent Sold Worldwide	41
Haldor Topsoe A/S to Supply Autothermal Reforming Unit for Air Products' CO plant	41
Synthesis of Intermediates by Organic Electrode Reaction	41
Technical Center at Tsukuba	42
CHEMTEX to Build Polyester Staple Plant in India	42
Center Plans Conferences on Chemical Safety Issues	42
High-Temperature Combustion Catalyst Carrier	42
Top Priority to Research and Development	43
Change from Steelmaker into High-Technology Enterprise	43

Business World

Energy ... 44/Electronics ... 44/Chemical Industries ... 46/Plant Engineering ... 48/Steel & Other Metals ... 50	
--	--

Index to Advertisers	51
-----------------------------	----

October 1986 Vol. 18 No. 10 (No. 202)

Changes in International Environment and Japanese Petrochemical Industry	
by Yukio Kawamura	5
Production of Polyolefins with Ziegler-Natta Catalyst	
by H. Kashiwa & A. Toyota	14
Present Situation of Petrochemicals Markets in Asian Countries and Their Position in the World	20
Production Trends in South Korean Petrochemical Industry	24
Present Situation and Plans of Petrochemicals Production Facilities in Thailand	28
Trends in Singapore Petrochemical Industry	32
Present Situation and Plans of Petrochemicals Production Facilities in Indonesia	35

News Scope

Kellogg Modifies Agric Ammonia Plant After Unit Sets World Operating Record	13
New Membrane with High Flux-Density and Low Fouling-Propensity	19
Ibn-Hayyan Producing VCM and PVC	23
Monsanto Chemical Company Breaks Ground for New Applications Development Center	31
SHARQ Signs Two-Tranche Loan with 12 National, Offshore Banks	34
Haldor Topsoe A/S Wins Indian Hydrogen Plant Order	38

Business World

Energy ... 38/Electronics ... 39/Chemical Industries ... 40/Plant Engineering ... 43/Steel & Other Metals ... 44	
--	--

Congress & Exhibition

Second Symposium on Molding and Forming Is Rescheduled	46
International Process Engineering Exhibition Is Launched	46

Index to Advertisers	47
-----------------------------	----

November 1986 Vol. 18 No. 11 (No. 203)

The Present Market Structure for Oil — And Its Evolution	
by Ferdinand E. Banks	5
Reconsideration of East-West Trade Inactivity in the First Half of the 1980s and Future Prospects	
by Kazuo Ogawa	13

Export-Import Trends of Chemical Products	
by Staff Writers	19
The Role of the Chemical Industry in the 1990s: Outlook From Tokyo	
by Mutsumi Hongoh	24

News Scope

Sabic Notes 10th Anniversary Announces Decentralized Sales	12
Alphaprobe Technologies Announces Automated DNA Probe Analysis	18
PET Film Market to Reach \$2.2 Billion by 1990	28
Mycogen Announces Executive Management Team	29
At Gastech '86 M.W. Kellogg Engineer Says Modular Engineering Offers "Significant Savings" to Gas Processor	29
Shape Memory Steel Alloy	30
Carbon Fiber From Coal Pitch	30
High-Speed Automatic Amino Acid Analyzer	30
New Ceramics for Structural Materials	31
Computer-Aided Molecular Design	31
4Mb DRAM Chip Commercialization	31
New Microcomputer Technology Firm	31
Fine Ceramics	32
Terminal Unit Joint Development	32
Quats—Attractive Specialty Surfactants	32
Ailing U.S. Fertilizer Industry Faces New Challenges	32
Settlements of Main Japanese Computer Manufacturers	33
Advance Into Information/Communication Market	34
Sulphuric Acid Production Costs	34
Energy Demand Will Level Off in U.S.	35
Chemical Plant Projects in China	35
Japanese Silicon Wafer Production in U.S.	36
Gas-Phase Polypropylene Production Technology	36
Discovery of Hydrothermal Ore Deposit	36
Ethylene Project in Taiwan	37

Business World

Energy ... 37/Electronics ... 37/Chemical Industry ... 38/Plant Engineering ... 40/Steel & Other Metals ... 42	
--	--

Index to Advertisers	43
-----------------------------	----

December 1986 Vol. 18 No. 12 (No. 204)

International Trends in Catalyst Industry and Catalyst Technology in Japan	
by Kenji Saeki & Katsuo Taniguchi	5
Hydrocracking of Petroleum Residue to Middle Distillates	
by B.B. Brahmachari, M.R. Saha, A.N. Bose, S.B. Basu, B. Chatterjee, A.K. Ganguli & V.A. Krishna Murthy	15
Advanced Information Society and Engineering	
by Hideo Idemura	20
The Present Situation of and Future Prospects for Optical Disks	
by H. Ryu, K. Akagane & H. Kori	26

Congress & Exhibition

Symposium on Preventing Chemical Accidents Slated for February in Washington, D.C.	14
--	----

News Scope

New Company for Optical Instrumentation Control System	19
ICI to Build a Major High Purity Zirconia Plant	33
Despite Losses, Biotechnology Still Holds Promise	34

New Publication

Basic Cost Engineering	25
ENAA Model Form of Contract	25

Business World

Energy ... 36/Chemical Industries ... 37/Plant Engineering ... 40/Steel & Other Metals ... 43	
---	--

Index to Advertisers	43
-----------------------------	----

